

INTRODUCTION

The U.S. Environmental Protection Agency (EPA) initiated the International Co-Control Benefits Analysis Program (ICAP) in 1998 to support and promote the analysis of public health and environmental benefits of integrated strategies for greenhouse gas mitigation and local environmental improvement in developing countries. Through this cooperative program, government agencies and research institutions in Argentina, Brazil, China, Chile, Korea, and Mexico are conducting analysis of the local air pollution health benefits and greenhouse gas reductions that could be realized through implementation of integrated environmental strategies. This work focuses on the use of clean energy technologies and includes extensive interaction with domestic and international policy makers. These efforts are building recognition and understanding of the potential for environmental “co-benefits” of integrated strategies and are enhancing support for their implementation.

In order to promote the development and implementation of integrated environmental strategies in developing countries, the EPA designed ICAP with the following objectives.

- ❖ Support and promote analysis and quantification of the environmental, public health, and greenhouse gas mitigation benefits of integrated air pollution and greenhouse gas reduction strategies and measures for the energy sector in developing countries,
- ❖ Develop, test and refine effective analytical methodologies that meet in-country policy analysis needs and will help to guide further collaboration on co-benefits analysis,
- ❖ Assist developing country policy makers with the development of effective integrated strategies for addressing local air pollution and greenhouse gas reduction,
- ❖ Build lasting institutional and human capacity for analysis of health, environmental and greenhouse gas mitigation impacts of alternative strategies and development of integrated air pollution and climate change policies.

Initial work has focused on estimating the health benefits and greenhouse gas reductions from climate change and air pollution strategies. Initial results from the work in Chile, China, and Korea indicate that energy sector greenhouse gas mitigation measures under consideration in these countries will significantly reduce local air pollution and will result in considerable public health and economic benefits. Climate change and air pollution officials in the participating countries have been actively engaged in this work and have expressed strong interest in using the results to improve understanding of the ancillary benefits of greenhouse gas mitigation and to develop integrated climate change and local air pollution control strategies.

In each participating country, multidisciplinary project teams conduct each assessment. These teams include climate change, air pollution, health effects, and economic valuation experts. Each country has also designated one or more national government officials that are responsible for guiding and overseeing the work. The leading institutions for each country’s project team are listed in table 1-1 below. The U.S. EPA provides financial and technical support for the work of these country teams and has assembled a team of technical experts to assist the countries with their assessments. This technical expert team is lead by the National Renewable Energy Laboratory (NREL), with active participation of Abt Associates, World Resources Institute and other cooperators.

Table 1.1 In-Country Lead Government Agencies and Technical Institutions

Argentina Climate Change Unit of the Secretariat of Sustainable Development and Environmental Policy Universidad Nacional del Sur	Brazil CETESB-Environmental Protection Agency for the State of Sao Paulo University of Sao Paulo
Chile Comision Nacional del Medio Ambiente (CONAMA) P. Catholic University of Chile	China State Environmental Protection Administration (SEPA) China Council for International Cooperation on Environment and Development (CCICED), Pollution Control Working Group
Korea Ministry of Environment Korea Environment Institute; Korea Institute of Science and Technology	Mexico Instituto Nacional de Ecologia (INE)

The ICAP project and in particular the country analysis teams have made excellent progress with their analyses and have developed results of significant value to local and international policy makers. This report provides an overview of this progress and a summary of the methods and preliminary results from the ICAP work to date. Following this introduction, Section 2 describes the overall ICAP methodology and approach that has been developed and applied in each partner country. Section 3 contains case study summaries of the assessments and work-to-date in each participating country. For China, Chile and Korea, these country reports are summaries of larger, more comprehensive reports that have been prepared by the country teams to disseminate results to policymakers. For Argentina, Brazil and Mexico, the reports are summaries of workplans and preliminary results for assessments that are in the early stages of implementation.

This ICAP summary report is the first in a series of international reports on this topic designed to share the results of these important assessments with the international community. To promote international dialogue and better understanding of integrated strategies, the program has established an ICAP web site (www.nrel.gov/icap). This report as well as country information and reports and links to other programs involved in promoting integrated strategies for local and global environmental issues are available at this site.